

LADY BIRD JOHNSON PARK 1932 ORNAMENTAL PEAR

(Lady Bird Johnson Park 1932 *Pyrus* sp.)

NPS Witness Tree Protection Program

George Washington Memorial Parkway

Lady Bird Johnson Park

Columbia Island

South terminus

Near Boundary Channel Bridge

Arlington

Virginia

HALS VA-13

VA-13

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN LANDSCAPES SURVEY

National Park Service

U.S. Department of the Interior

1849 C Street NW

Washington, DC 20240-0001

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HALS No. VA-13

<u>Location:</u>	George Washington Memorial Parkway, Lady Bird Johnson Park, Columbia Island, south terminus, near Boundary Channel Bridge, Arlington, Virginia
<u>Owner/Manager:</u>	U.S. Government, National Park Service
<u>Present Use:</u>	Ornamental and shade tree
<u>Significance:</u>	The Lady Bird Johnson Park Ornamental Pear (<i>Pyrus</i> sp.) is significant because of its size, longevity, and association with the development of Columbia Island.
<u>Author & Discipline:</u>	Jonathan Pliska, Landscape Architectural Historian, 2006
<u>Project Information:</u>	The Witness Tree Protection Program was a pilot project undertaken by the Historic American Landscapes Survey and the National Capital Region of the National Park Service. The principals involved were Richard O'Connor, Chief, Heritage Documentation Programs; Paul D. Dolinsky, Chief, Historic American Landscapes Survey; Darwina Neal, Chief, Cultural Resources, National Capital Region; Jonathan Pliska, Historian, Historic American Landscapes Survey; Jet Lowe and James Rosenthal, Photographers, Heritage Documentation Programs.

PART I. HISTORICAL INFORMATION:

Lady Bird Johnson Park is a constructed 157-acre island located immediately south of Theodore Roosevelt Island along the Virginia shore of the Potomac River. According to the park's cultural landscape inventory, it was originally known as Columbia Island and was created between about 1915-30 to "serve as the western terminus of Arlington Memorial Bridge and a symbolic entrance to the Nation's Capital."¹ Prior to this time, the Potomac flowed swiftly through narrow channels north of Theodore Roosevelt Island (HALS DC-12) and much more slowly to the south, where the river widened out into deeper tidal waters. These conditions resulted in the accumulation of sediment loads and the formation of muddy shoals at the present site of Lady Bird Johnson Park even before

¹ Kay Fanning and Judith Early, *Lady Bird Johnson Park, George Washington Memorial Parkway: National Park Service, Cultural Landscapes Inventory*, rev. ed. (Washington, D.C.: U.S. Dept. of the Interior, National Park Service, National Capital Region, Cultural Landscapes Program, 2004), (1)5.

formal construction began, and by the late nineteenth century, the site was covered by a narrow silt bar.² From 1872-1911 the U.S. Army Corps of Engineers coordinated the first attempt to improve navigation in the river, resulting in the creation of a channel capable of supporting large ships.³ In 1892, a training dike, a line of dredged mud and roughly piled stone set below water level, was built along the Virginia shore in order to “increase the scouring effect” of the Potomac River and remove the extensive sedimentation load that had accumulated south of Theodore Roosevelt Island.⁴

In 1901 the Senate Park Commission, commonly known as the “McMillan Commission,” began to develop plans for the present design of Washington’s monumental core. The commission’s plan for the National Mall, heavily influenced by the City Beautiful movement, has become one of the defining features of Washington, D.C. Less well known is the commission’s plan for a “Columbia Island” to be developed south of Theodore Roosevelt Island, with a narrow water channel separating the two.

Congressional acceptance of this plan modified the objectives of the Potomac River project to include the reclamation of sedimentation into usable land. By 1915, the Army Corps of Engineers had begun depositing dredged material south of Theodore Roosevelt Island, possibly incorporating the 1892 training dike.⁵ By 1927, these dredging activities resulted in the formation of Columbia Island, although the unfinished island had already been added to Washington, D.C.’s park system in 1922. In 1932, both Arlington Memorial Bridge and Mount Vernon Memorial Highway opened to the public. Arlington Memorial Bridge crosses the island’s width and connects Arlington National Cemetery and the Lincoln Memorial while Mount Vernon Memorial Highway, today part of George Washington Memorial Parkway, runs the length of the island and continues approximately fifteen miles south to the entrance of the Mount Vernon estate. The last phase of work on the Mount Vernon Memorial Highway project included seeding grass on Columbia Island and planting approximately seventy-five ornamental flowering trees, less than half of the approximately 200 originally planned. Large numbers of shrubs were also to be planted, but few were actually put in place. Several species of ornamental pear (*Pyrus pashia*, *P. serotina*, *P. ovoidea*, *P. bretschneideri*, *P. calleryana*, and in greatest number, *P. ussuriensis*) were among the relatively few trees that were planted in 1932. These pear trees were grown at the agricultural experimentation facility at Beltsville, Maryland.⁶

The historic significance of the pear trees is, however, relatively unknown as later plantings have since come to define the public’s perception of the island’s landscape. Large-scale plantings did not take place until the Beautification Program of the Lyndon B. Johnson Administration. This work included the planting of over one million daffodils

² Ibid, (2A)1.

³ Ibid, (2A)2..

⁴ Gordon Chappell, *Historic Resource Study, East and West Potomac Parks: A History* (Washington, D.C.: National Park Service, 1973), quoted in Fanning and Early, (2A)3.

⁵ Chappell, 56; KressCox Associates, P.C., *Historic Structures Report: Arlington Memorial Bridge, Washington, D.C.* (Washington, D.C.: National Park Service, 1985), 175-76.

⁶ Ibid.

(*Narcissus* sp.) in 1967-68 and 260 deciduous and evergreen trees in 1968. Also in 1968, Columbia Island was renamed Lady Bird Johnson Park to commemorate the First Lady's beautification and conservation efforts across the nation. The same year, landscape architect Edward D. Stone, Jr. began a tree-planting plan for the park that is still in the process of being implemented in the present day. This plan includes more than 2,000 dogwoods (*Cornus florida*), nearly 1,000 pines, and approximately 800 deciduous canopy trees.⁷ Installed as part of Lady Bird Johnson Park in 1976, the Lyndon Baines Johnson Memorial Grove was designed as monument to the former president and his conservation ethos. In addition to the massive, roughly carved granite megalith at the center of the grove, approximately 900 white pines (*Pinus strobes*) are planted on the seventeen-acre site.⁸ Because of the prominence of President and First Lady Johnson, the plantings installed under their direction and in their memory are the most obvious and best-documented vegetation present on the island. Though considerably older, the historical significance of the ornamental pears is not as readily apparent. This disconnect may help explain the current lack of opposition to a construction project that threatens many of these trees. As of 2002, the Federal Highway Administration plans to demolish the 1932 Boundary Channel Bridge (HAER DC-19) and replace it with a modern counterpart designed with a longer, lower curvature. Located at the southern terminus of Lady Bird Johnson Park, this project will likely require the removal the oldest and grandest of the remaining 1932 *Pyrus* plantings remaining on the island.

PART II. BIOLOGICAL INFORMATION

The Lady Bird Johnson Ornamental Pear is one of six species of pear originally planted in 1932: *Pyrus pashia*, *P. serotina*, *P. ovoidea*, *P. bretschneideri*, *P. calleryana*, and *P. ussuriensis*. However, because variations between these species are subtle, a positive identification has not been made. In general, these species are members of the approximately twenty total species of deciduous or semi-evergreen small trees that comprise the *Pyrus* within the rose family Rosaceae.⁹ These trees typically exhibit green, simple, ovate to elliptic shaped leaves arranged alternately on stems, before turning red or purple and falling in autumn. Leaf size varies from less than 1" to 4" in length, but all species feature serrated margins. Leaves are acuminate (tapering to a point) with pinnate venation, as the veins are arranged on either side of a primary vein or midrib.¹⁰

All pear trees produce showy white flowers measuring from 3/8" to 1 1/2" in diameter. Fruits are typically green or greenish-yellow but vary greatly by species. Among the six species in question, fruits are typically not in the characteristic top-shape, but are

⁷ Ibid., (3A)1.

⁸ Ibid., (2B)2.

⁹ Liberty Hyde Bailey and Ethyl Hyde Bailey, "*Pyrus*," in *Hortus Third: A Concise Dictionary of Plants Cultivated in the United States and Canada*, revised and expanded by the staff of the Liberty Hyde Bailey Hortorium, Cornell University (New York: Macmillan Publishing Co., Inc., 1976), 935.

⁹ G. H. Collingwood and Warren D. Brush, *Knowing Your Trees*, ed. Devereux Butcher (Washington, D.C.: The American Forestry Association, 1964), 931.

¹⁰ Michael A. Dirr, *Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation and Uses*, 5th ed. (Champaign, Ill.: Stipes Publishing L.L.C., 1998), 806-12.

generally rounded. These range from $\frac{1}{2}$ " (*P. calleryana*) to $2\frac{1}{2}$ " inches in diameter (*P. ussuriensis*).¹¹

Bark coloration is typically a gray-brown on mature trunks, and branching habit is upright and may be mildly conical. Heights of up to 45' and symmetrical crown spreads of 30' are not uncommon.¹² Pear trees grow at a fast rate and may add as much as 12' to 15' feet in height over eight to ten years.¹³ Typical life expectancy is approximately fifty years. Although it has not been measured, the Lady Bird Johnson Park Ornamental Pear appears to have reached or eclipsed the typical maximum size for the genus *Pyrus*, and at nearly seventy-five years of age, it is significantly older than the standard life expectancy.

Soils for pear should be strong and heavy. Trees thrive in sandy loams and clay loams due the soils' high humus content and moisture-holding capacity, and adequate drainage and porous subsoil are essential for optimal development.¹⁴ While insects and diseases often affect pear trees, most do not cause serious harm and can be effectively controlled. However, fire blight is an extremely serious disease caused by bacteria that gain entrance through flowers and insect damage, which causes young growth and fruit to blacken and die.¹⁵ The Lady Bird Johnson Park Ornamental Pear is in good overall health and does not appear to be suffering from disease or pest infestation. It is, however, in imminent danger of being removed to facilitate the replacement of the Boundary Channel Bridge.

¹¹ Ibid.

¹² Edward F. Gilman and Dennis G. Watson, "Pyrus calleryana 'Redspire': Callery Pear," (Gainesville, Fla.: University of Florida, Institute of Food and Agricultural Sciences, November 1993), <http://edis.ifas.ufl.edu/ST538> (accessed 12 June 2006).

¹³ Dirr, 807.

¹⁴ Liberty Hyde Bailey and Ethyl Hyde Bailey, "Pear," in *Hortus Third: A Concise Dictionary of Plants Cultivated in the United States and Canada*, revised and expanded by the staff of the Liberty Hyde Bailey Hortorium, Cornell University (New York: Macmillan Publishing Co., Inc., 1976), 830.

¹⁵ Ibid.